

Mr. Hampson, 'Fauna of British India, Moths,' vol. i. p. 355, includes this genus in his family Thyrididæ, placing that family after the Drepanulidæ.

1. **Rhodoneura pulchelloides.** (Tab. LIX. fig. 1.)

*Siculodes pulchelloides*, Pagenst. Iris, v. p. 64, t. 1. fig. 4<sup>1</sup>.

*Hab.* PANAMA, Volcan de Chiriqui 3000 feet (*Champion*). — COLOMBIA, Bogota<sup>1</sup>; AMAZONS<sup>1</sup>; PERU<sup>1</sup>; S.E. BRAZIL, Santa Catharina<sup>1</sup>.

The single specimen received from the Volcan de Chiriqui agrees with Dr. Pagenstecher's figure, except that it has the wings much more heavily marked, but I believe it belongs to the same species.

2. **Rhodoneura sterna.**

*Siculodes sterna*, Feld. & Rogenh. Reise der Nov., Lep. t. 134. fig. 13<sup>1</sup>; Guen. Ann. Soc. Ent. Fr. 1877, p. 291<sup>2</sup>; Pagenst. Iris, v. p. 63<sup>3</sup>.

*Hab.* PANAMA, Volcan de Chiriqui 4000 to 6000 feet (*Champion*). — COLOMBIA, Bogota<sup>1 2 3</sup>.

The specimens before me are very similar to Felder and Rogenhofer's figure, but they are slightly paler in colour, and have the dark markings not quite so distinct.

3. **Rhodoneura paullula.** (Tab. LIX. fig. 2.)

*Siculodes paullula*, Pagenst. Iris, v. p. 65, t. 1. fig. 20 (neurulation)<sup>1</sup>.

*Hab.* GUATEMALA, Cahabon and Panima in Vera Paz (*Champion*); PANAMA, Chiriqui<sup>1</sup> (*Ribbe, in mus. Staudinger*), Bugaba 800 to 1500 feet (*Champion*).

We are indebted to Dr. Staudinger for the loan of the type of this and the other species of Siculidæ described by Dr. Pagenstecher from our country. The specimens received from Guatemala are brighter in colour than those from Chiriqui, and they have the markings pinker, the female being more heavily marked than the male. A specimen from Chiriqui is figured.

4. **Rhodoneura violalis.** (Tab. LIX. fig. 3.)

*Siculodes violalis*, Pagenst. Iris, v. p. 69<sup>1</sup>.

*Hab.* MEXICO, Jalapa (*M. Trujillo*); GUATEMALA, Las Mercedes 3000 feet (*Champion*). — ECUADOR<sup>1</sup>.

Both our specimens are females, not in very good condition. They are almost identical with the type.

5. **Rhodoneura arcuata.**

*Siculodes arcuata*, Pagenst. Iris, v. p. 69<sup>1</sup>.

*Hab.* PANAMA, Chiriqui (*Ribbe*<sup>1</sup>).

I have not seen a specimen of this species.



6. **Rhodoneura anastomosalis.** (Tab. LIX. fig. 6.)

*Siculodes anastomosalis*, Pagenst. Iris, v. p. 76<sup>1</sup>.

*Hab.* PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*<sup>1</sup>), Volcan de Chiriqui 2000 to 3000 feet (*Champion*), Panama city (*J. J. Walker*).

Our specimens are slightly darker than the type.

7. **Rhodoneura lævigata.** (Tab. LIX. fig. 4, var.)

*Siculodes lævigata*, Pagenst. Iris, v. p. 78<sup>1</sup>.

*Hab.* PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*), Volcan de Chiriqui 2000 to 3000 feet (*Champion*); PERU<sup>1</sup>; AMAZONS<sup>1</sup>.

Our specimens resemble one communicated by Dr. Staudinger, labelled *Siculodes lævigata*, Pagenst., var.

PHARAMBARA.

*Pharambara*, Walker, Cat. xxxiv. p. 1274 (1865).

*Siculodes*, Guenée, Sect. III., Pagenstecher, Iris, v. p. 128.

This genus was founded by Walker upon a single species from Mysol. A large number of species are now known, mostly from the eastern islands; one occurs in Central America.

1. **Pharambara polychloralis.** (Tab. LIX. fig. 5.)

*Siculodes polychloralis*, Pagenst. Iris, v. p. 108<sup>1</sup>.

*Hab.* PANAMA, Chiriqui (*mus. Staudinger*<sup>1</sup>), Volcan de Chiriqui 2000 to 3000 feet, Bugaba 800 to 1500 feet (*Champion*).—COLOMBIA; AMAZONS.

IZA.

*Iza*, Walker, Cat. xxxii. p. 521 (1865).

*Siculodes*, Guenée, Sect. IV., Pagenstecher, Iris, v. p. 128.

The type of this genus is *Siculodes nubecula*, Guen., from Rio Janeiro. An allied South-American form extends into the southern part of our region.

1. **Iza hedilalis.** (Tab. LIX. fig. 7.)

*Pyrallis* (?) *hedilalis*, Walk. Cat. xix. p. 895<sup>1</sup>.

*Siculodes hedilalis*, Pagenst. Iris, v. p. 115<sup>2</sup>.

*Siculodes amethystea*, Feld. & Rogenh. Reise der Nov., Lep. t. 134. fig. 6<sup>3</sup>; Guen. Ann. Soc. Ent. Fr. 1877, p. 291<sup>4</sup>.

*Siculodes apicalis*, Pagenst. Iris, v. p. 70<sup>5</sup>.

*Hab.* PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*<sup>5</sup>), Volcan de Chiriqui 2000 to 3000 feet (*Champion*).—COLOMBIA, Bogota<sup>5</sup>; PERU<sup>5</sup>; AMAZONS<sup>3 4</sup>, Ega<sup>1 2</sup>; BRAZIL, Blumenau<sup>5</sup>.

Dr. Pagenstecher's type of *Siculodes apicalis* agrees with that of *Pyrallis hedilalis*,



Walk., in the National Museum. Felder and Rogenhofer's figure of *Siculodes amethystea* is a very poor one, but I have no doubt their insect belongs to the same species.

### AZIBA.

*Aziba*, Walker, Cat. xxxii. p. 520 (1865).

*Vadata*, Walker, loc. cit. p. 517 (part.).

*Siculodes*, Guenée, Sect. VII., Pagenstecher, Iris, v. p. 128.

In our region this genus is represented by one species.

#### 1. *Aziba macropterana*. (Tab. LIX. fig. 8.)

*Vadata macropterana*, Walk. Cat. xxxii. p. 517<sup>1</sup>.

*Siculodes macropterana*, Guen. Ann. Soc. Ent. Fr. 1877, p. 293<sup>2</sup>; Pagenst. Iris, v. p. 75<sup>3</sup>.

*Hab.* MEXICO, Jalapa (*Schaus, M. Trujillo*); GUATEMALA, in the city (*Candèze, in mus. D.*).—BRAZIL<sup>1 2 3</sup>.

This species varies considerably in colour, some specimens being much darker than others. An example from Jalapa is figured.

### DRACONIA.

*Draconia*, Hübner, Verz. bek. Schmett. p. 197 (1816).

This genus is represented in our region by three species, two of which I place in it with considerable doubt.

The type of *Draconia*, *D. peripheta* (Cram.), is a remarkable insect, hitherto known only from the "West Indies."

#### 1. *Draconia peripheta*. (Tab. LIX. fig. 12.)

*Phalæna peripheta*, Cram. Pap. Exot. ii. p. 54, t. 131. fig. G<sup>1</sup>.

*Draconia peripheta*, Hübner, Verz. bek. Schmett. p. 197<sup>2</sup>.

*Siculodes peripheta*, Pagenst. Iris, v. p. 96<sup>3</sup>.

*Hab.* PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).—WEST INDIES<sup>1</sup>.

The specimen from Chiriqui in Dr. Staudinger's collection has the pale markings on the wings more suffused than is shown in Cramer's figure; but I have very little doubt that it belongs to the same species, the smaller spots on the wings being almost identical in form. It is the only example I have seen.

#### 2. *Draconia denticulata*. (Tab. LIX. fig. 10.)

*Siculodes denticulata*, Pagenst. Iris, v. p. 98, t. 1. fig. 12<sup>1</sup>.

*Hab.* NICARAGUA, Chontales (*Belt*); PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*<sup>1</sup>), Bugaba 800 to 1500 feet (*Champion*).—BRAZIL<sup>1</sup>.

The five specimens of this species before me show a slight variation in size and



colour, some being much paler than others and with the lighter markings more distinct. We figure an example from Bugaba.

### 3. *Draconia* (?) *rusina*, sp. n. (Tab. LIX. fig. 9.)

Primaries and secondaries pale fawn-colour; the primaries with a large angular whitish hyaline marking, extending from the anal angle almost to the apex, and crossed by fine fawn-coloured lines, and with several small hyaline spots just below the middle of the cell and along the inner margin; the secondaries with the base and a band crossing about the middle whitish hyaline; the hyaline markings on both wings formed of small rounded or angular spots: head, antennæ, thorax (except in front), and abdomen dark fawn-colour; the collar, the front of the thorax, and the tegulæ greyish-white. Expanse  $2\frac{1}{2}$  inches.

*Hab.* GUATEMALA, La Tinta in Vera Paz (*Champion*).

One specimen, differing greatly from the preceding species in having the costal margin of the primaries strongly arched.

## Fam. PYRALIDÆ.

### Subfam. *CHRYSAUGINÆ*.

*Semniidæ*, Lederer, Wien. ent. Monats. vii. p. 333 (1863).

### SEMNIA.

*Semnia*, Hübner, Verz. bek. Schmett. p. 353 (1816); Walker, Cat. xix. p. 833; Lederer, Wien. ent. Monats. vii. p. 333; Ragonot, Ann. Soc. Ent. Fr. 1890, p. 479 (45).

*Acronolepia*, Westwood, Zool. Journ. v. p. 451 (1834).

The type of this Tropical-American genus is *S. auritalis*, Hübn. (= *Acronolepia quadricolor*, Westw.); four other species have been referred to it by Felder and Rogenhofer.

#### 1. *Semnia auritalis*.

*Semnia auritalis*, Hübn. Zutr. Samml. exot. Schmett. ii. p. 28, figs. 361, 362<sup>1</sup>; Verz. bek. Schmett. p. 353<sup>2</sup>; Lederer, Wien. ent. Monats. vii. p. 334, t. 6. fig. 4<sup>3</sup>; Walk. Cat. xix. p. 834<sup>4</sup>; Ragon. Ann. Soc. Ent. Fr. 1890, p. 480 (46)<sup>5</sup>.

*Acronolepia quadricolor*, Westw. Zool. Journ. v. p. 452<sup>6</sup>.

*Acronolepia biguttalis*, Feld. & Rogenh. Reise der Novara, Lep. t. 134. fig. 18<sup>7</sup>.

*Virbia notata*, Walk. Cat. ii. p. 472<sup>8</sup>.

? *Noctua elongata*, Sepp, Pap. de Surinam, i. p. 93, t. 43<sup>9</sup>.

*Hab.* MEXICO, Paso de San Juan in Vera Cruz (*Schaus*); GUATEMALA, Teleman and Panima in Vera Paz, Zapote (*Champion*); PANAMA, Bugaba 800 to 1500 feet (*Champion*), Volcan de Chiriqui (*Trötsch, in mus. Staudinger*), Panama city (*J. J. Walker*), Obispo (*Salvin, in mus. D.*).—GUIANA, Surinam<sup>9</sup>; AMAZONS<sup>7</sup>; BRAZIL<sup>3 5 6 8</sup>, Rio Janeiro<sup>1 4</sup>.

The spot at the base of the primaries varies in colour: in all the Guatemalan specimens before me it is dark yellow, almost of the same colour as the secondaries;



in those from Panama and South America it is pale yellow, in some examples almost white. Southern specimens also have the primaries of a much redder brown colour at the base.

### ANISOTHRIX.

*Anisothrix*, Ragonot, Ann. Soc. Ent. Fr. 1890, p. 478 (44).

Mons. Ragonot includes a single species in this genus: it is from Chanchamayo\*, and an insect sent us by Mr. Forrer from N.W. Mexico seems to belong to the same species.

#### 1. *Anisothrix adustalis*.

*Anisothrix adustalis*, Ragon. Ann. Soc. Ent. Fr. 1890, p. 479 (45), t. 7. fig. 5 (*perustalis*)<sup>1</sup>.

*Hab.* MEXICO, Presidio de Mazatlan (*Forrer*).—PERU, Chanchamayo<sup>1</sup>.

One specimen in poor condition, very similar to Mons. Ragonot's figure.

### EPISEMNIÆ.

*Episemnia*, Ragonot, Ann. Soc. Ent. Fr. 1890, p. 481 (47).

Two species are referred to this genus by Mons. Ragonot—*E. subauritalis*, Ragon., and *E. josialis* (Feld. & Rogenh.), both from Tropical South America, one of which extends northward to Mexico; a third is now added.

#### 1. *Episemnia josialis*.

*Acronolepia josialis*, Feld. & Rogenh. Reise der Novara, Lep. t. 134. fig. 24 (♂)<sup>1</sup>.

*Hab.* MEXICO, Atoyac in Vera Cruz (*Schumann*).—AMAZONS<sup>1</sup>.

One specimen, identical with Felder and Rogenhofer's figure.

#### 2. *Episemnia ligatalis*, sp. n. (Tab. LIX. fig. 11.)

Primaries black, with a wide yellow band extending down the middle from the base to the outer margin, the fringe black; secondaries black, with a wide central yellow band, which extends from the base to the outer margin, the fringe from the apex to the anal angle black, the inner margin and anal angle yellow; the underside of both wings as above: head, collar, and sides of the abdomen bright yellow, the antennæ, thorax, abdomen above, and legs black. Expanse  $1\frac{1}{4}$  inch.

*Hab.* MEXICO, Paso de San Juan in Vera Cruz (*coll. Schaus*).

One specimen. This species very closely resembles *Josia ligata*, Walk.

### MAPETA.

*Mapeta*, Walker, Cat. xxvii. p. 17 (March, 1863); Ragonot, Ann. Soc. Ent. Fr. 1891, p. 646 (260).

*Homalochroa*, Lederer, Wien. ent. Monats. vii. p. 332 (October, 1863).

Walker placed this genus amongst the Crambites in his family Galleridæ. Lederer

\* The locality is stated to be in "Amérique centrale"; but this is evidently a mistake.



includes it amongst the Pyralidæ, in his section Homalochroidæ, placing it at the beginning of that family. *Mapeta* is represented in Central America by three species.

### 1. *Mapeta xanthomelas*.

*Mapeta xanthomelas*, Walk. Cat. xxvii. p. 17<sup>1</sup>, and xxxv. p. 1701<sup>2</sup>; Ragon. Ann. Soc. Ent. Fr. 1891, p. 646 (260)<sup>3</sup>.

*Homalochroa æstivalis*, Lederer, Wien. ent. Monats. vii. p. 333, t. 6. fig. 3<sup>4</sup>.

*Pyralopsis divisa*, Boisd. Lép. Guat. p. 94 (1870)<sup>5</sup>.

*Hab.* MEXICO, Orizaba (*H. J. Elwes*; *Boucard, in mus. D.*), Coatepec (*coll. Schaus*); GUATEMALA<sup>5</sup>, in the city (*Rodriguez*), San Gerónimo and Sabo in Vera Paz (*Champion*); COSTA RICA (*Van Patten, in mus. D.*), Candelaria Mts. (*Underwood*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*; *Arcé, in mus. D.*), Bugaba 800 to 1000 feet (*Champion*), Colon (*Boucard, in mus. D.*).—COLOMBIA, Bogota<sup>1</sup>; VENEZUELA<sup>1 4</sup>; TRINIDAD; JAMAICA<sup>1</sup>.

A common and widely distributed species in Central America; it closely resembles *Pyralopsis homalochroa*, Feld. & Rogenh., from the same country.

### 2. *Mapeta schausi*, sp. n. (Tab. LIX. fig. 14, ♂.)

*Male.* Primaries golden-green, the costal and outer margins pale pea-green; secondaries bright orange-yellow; the fringe yellow; the underside bright yellow, the costal margin, apex, and outer margin of the primaries black: head pale greyish-green, the palpi black, the tegulæ, thorax, and abdomen bright orange-yellow, the antennæ, anus, and legs pale grey. Expanse 1 $\frac{3}{4}$  inch.

*Hab.* MEXICO, Rinconada in Vera Cruz (*coll. Schaus*).

Mr. Schaus informs me that he captured two specimens of this fine species; I have much pleasure in naming it after him.

### 3. *Mapeta cynosura*, sp. n. (Tab. LIX. fig. 13, ♂.)

*Male.* Primaries yellowish-green, the costal, outer, and inner margins edged with white; secondaries yellow, the fringe white; the underside yellowish-white, the primaries darker than the secondaries: head, palpi, and thorax white, the antennæ, abdomen, and legs yellowish-white. Expanse 1 $\frac{1}{4}$  inch.

*Hab.* MEXICO, Cuernavaca in Morelos (*H. H. Smith*).

Allied to *M. schausi*, but a much smaller insect.

## AZAMORA.

*Azamora*, Walker, Cat. xv. p. 1757 (1858).

*Torda*, Walker, Cat. xxviii. p. 436 (1863).

*Arica*, Walker, Cat. xxviii. p. 439.

*Thylacophora*, Ragonot, Ann. Soc. Ent. Fr. 1890, p. 490 (56).

The species of this genus are all from Tropical America. Mr. Warren, Trans. Ent. Soc. Lond. 1889, p. 238, has made a separate family for this and several closely allied genera under the name Azamoridæ, including all the species that have a membranous pouch at the base of the primaries in the male. Mons. Ragonot (Ann. Soc. Ent. Fr.



1891, p. 611) places Lederer's genus *Amblyura* under *Azamora*, but I believe them to be distinct.

1. ***Azamora penicillana*.** (Tab. LIX. fig. 17, ♀.)

*Torda penicillana*, Walk. Cat. xxviii. p. 437<sup>1</sup>.

*Azamora penicillana*, Warr. Trans. Ent. Soc. Lond. 1889, p. 239<sup>2</sup>.

*Thylacophora tortricoidalis*, Ragon. Ann. Soc. Ent. Fr. 1890, p. 491 (57), t. 5. figg. 2, 2a (♂)<sup>3</sup>.

*Hab.* COSTA RICA, Santa Clara Valley (*Zurcher*); PANAMA, Obispo (*Salvin, in mus. D.*).  
—GUIANA, Cayenne<sup>3</sup>; AMAZONS<sup>2</sup>, Pará<sup>1</sup>.

Three specimens, all females, agreeing with Walker's types in the National Museum. An example from Costa Rica is figured.

AMBLYURA.

*Amblyura*, Lederer, Wien. ent. Monats. vii. p. 357 (1863); Walker, Cat. xxxiv. p. 1290.

Lederer founded this genus upon a single species from Brazil; we now add two others from our region.

1. ***Amblyura proclea*, sp. n.** (Tab. LIX. fig. 15, ♂.)

*Male.* Primaries dark brown, the base and two rather wide bands partly crossing the wing from the inner margin pale reddish-brown, a very distinct white dot about the middle of the costal margin, beyond which nearer the apex is a very minute white streak, a marginal row of very minute white spots extending from the apex to the anal angle, the fringe dark brown; secondaries uniformly greyish-brown: head, antennæ, thorax, abdomen, and legs pale brown.—*Female.* Very similar to the male, but without the pouch at the base of the primaries. Expanse  $\frac{7}{10}$  inch.

*Hab.* MEXICO, Teapa in Tabasco (*H. H. Smith*); PANAMA, Bugaba (*Champion*).

We figure a male from Bugaba.

2. ***Amblyura cecropia*, sp. n.** (Tab. LIX. fig. 16, ♂.)

*Male.* Primaries dark glossy brown, crossed beyond the middle from the costal to the inner margin by a narrow pale yellowish-brown line, a marginal row of minute white dots extending from the apex to the anal angle, the fringe dark brown; secondaries slightly paler than the primaries; the underside as above.—*Female.* Similar to the male, but without the fold at the base of the primaries. Expanse  $\frac{1}{2}$  inch.

*Hab.* MEXICO, Atoyac in Vera Cruz (*H. H. Smith*); GUATEMALA, El Reposo 800 feet (*Champion*).

Two males and one female. A male from Atoyac is figured.

TOSALE.

*Tosale*, Walker, Cat. xxviii. p. 447 (1863); Ragonot, Ann. Soc. Ent. Fr. 1890, p. 499 (65).

*Fabatana*, Walker, Cat. xxxiv. p. 1265 (1865).

*Siparocera*, Grote, Check-list of North-Am. Moths, p. 52 (1882).

This is a small genus, of which, at most, two or three species are known; they closely resemble Tortricidæ, in which family Walker placed his genus *Tosale*. Several of the



following genera appear to be very closely allied to this one, if, indeed, they are distinct; but at present our material is insufficient to decide this point, as specimens cannot be spared for dissection.

1. **Tosale oviplagalis.** (Tab. LIX. figg. 18, ♂; 19, ♀.)

*Fabatana oviplagalis*, Walk. Cat. xxxiv. p. 1265 (1865)<sup>1</sup>.

*Asopia anthracioides*, Grote & Robins. Trans. Am. Ent. Soc. i. p. 15, t. 2. fig. 9 (♀) (1867)<sup>2</sup>.

*Siparocera nobilis*, Grote, Ann. Lyc. N. York, xi. p. 128 (1876)<sup>3</sup>.

*Siparocera nobilis*, Grote, Check-list of North-Am. Moths, p. 52<sup>4</sup>.

*Hab.* NORTH AMERICA<sup>1</sup>, New York<sup>3</sup>, Atlantic District<sup>2</sup>.—MEXICO, Presidio de Mazatlan (*Forrer*), Teapa in Tabasco (*H. H. Smith*), Paso de San Juan in Vera Cruz (*Schaus*); GUATEMALA, San Gerónimo, Senahu and Sinanja in Vera Paz, Cerro Zunil 4000 feet, Volcan de Atitlan 2500 to 3500 feet (*Champion*); COSTA RICA, Volcan de Irazu 6000 to 7000 feet (*Rogers*).

A common species in Mexico and Guatemala. The male specimen in Mr. Schaus's collection is in poor collection; it differs from the other specimens before me in having the primaries browner, with the bands very indistinct, and on the secondaries the black patch is more suffused. I should not care to name it without seeing more specimens. We figure a male from Teapa, and a female from Sinanja.

2. **Tosale** —?

*Hab.* PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).

Two worn specimens, both females.

SALOBRENA.

*Salobrena*, Walker, Cat. xxviii. p. 446 (1863); Ragonot, Ann. Soc. Ent. Fr. 1891, p. 615 (229).

Walker founded this genus upon a single species from the Amazons, the female only of which was known to him; a second species, also from the Amazons, has been added by Felder and Rogenhofer; and a third is now described from Eastern Mexico.

1. **Salobrena cyrisialis**, sp. n. (Tab. LIX. fig. 20, ♂.)

*Male.* Primaries pale brown, crossed about the middle from the costal to the inner margin by a wide darker brown band, which is edged on the inner side with a reddish-brown line, the fringe dark brown; secondaries dull greyish-brown: head, palpi, thorax, abdomen, and legs pale brown.—*Female.* Very similar to the male. Expanse  $\frac{6}{10}$  inch.

*Hab.* MEXICO, Jalapa (*M. Trujillo*), Teapa in Tabasco (*H. H. Smith*).

Two specimens. A male from Jalapa is figured.



ÆCTOPERIA.

*Æctoperia*, Zeller, Verh. zool.-bot. Ges. Wien, xxv. p. 331 (1875); Ragonot, Ann. Soc. Ent. Fr. 1890, p. 494 (60).

This genus was founded by Zeller upon a single species from Texas. Mons. Ragonot includes *Tamyra pusilla* and *T. gibbosa*, Feld. & Rogenh., the former from the Amazons and the latter from Colombia, in *Æctoperia*, and I now add two others from Central America.

1. *Æctoperia propylea*, sp. n. (Tab. LIX. figg. 21, 21 a, ♂; 22, ♀.)

*Male*. Primaries pale brown, crossed from the costal to the inner margin by three darker brown lines—the first, near the base, edged with paler brown on the inner side, the second, about the middle, edged with pale brown on the outer side, and the third submarginal and somewhat indistinct,—the fringe alternately light and dark brown; secondaries uniformly dark greyish-brown: head, antennæ, palpi, thorax, abdomen, and legs pale brown.—*Female*. Very similar to the male, but with the bands on the primaries indistinct. Expanse  $\frac{3}{4}$  inch.

*Hab.* MEXICO, Amula in Guerrero 6000 feet (*H. H. Smith*).

One male and three females.

2. *Æctoperia cynisca*, sp. n. (Tab. LIX. fig. 23, ♀.)

*Female*. Primaries uniformly dark brown, with a reddish-brown spot about the middle of the inner margin, which extends partly over the wing, and a marginal row of minute white dots on the outer margin, the fringe dark brown; secondaries dark brown: head, palpi, antennæ, thorax, abdomen, and legs dark brown. Expanse  $\frac{3}{4}$  inch.

*Hab.* MEXICO, Paso de San Juan in Vera Cruz (*coll. Schaus*); GUATEMALA, Purula, Senahu, San Juan, and San Gerónimo in Vera Paz, Las Mercedes (*Champion*).

There is a worn male of this species in Mr. Schaus's collection; it is apparently very similar to the female. We figure a female example from Purula.

CLYDONOPTERON.

*Clydonopteron*, Riley, Amer. Ent. iii. p. 287 (1880); Ragonot, Ann. Soc. Ent. Fr. 1890, p. 501 (67).

This genus is closely allied to *Æctoperia*, Zeller; one species, *C. tecomæ*, Riley, from the South-western States of North America, is included in it by its describer, and a second, *Salobrena genualis*, Feld. & Rogenh., from the Amazons, is added by Mons. Ragonot. A third from Central America is here described.

1. *Clydonopteron pomponius*, sp. n. (Tab. LIX. fig. 24, ♀.)

*Female*. Primaries pale brown, crossed about the middle from the costal to the inner margin by a rather wide yellowish-fawn-coloured band, beyond which is a dark brown line edged with white on the costal margin; secondaries pale brown; the fringe of both wings pale brown: head, palpi, thorax, abdomen, and legs pale brown. Expanse  $\frac{3}{4}$  inch.

*Hab.* MEXICO, Presidio de Mazatlan (*Forrer*); GUATEMALA, Senahu in Vera Paz (*Champion*).



The Guatemalan specimen, a male, is in very bad condition, and unfit to describe. We figure a female from Presidio.

### SACCOPLEURA.

*Saccopleura*, Ragonot, Ann. Soc. Ent. Fr. 1890, p. 502 (68).

Mons. Ragonot places this genus between *Clydonopteron* and *Epitamyra*. It includes a single species from Chiriqui, a specimen of which I have not seen.

#### 1. *Saccopleura catocalis*.

*Saccopleura catocalis*, Ragon. Ann. Soc. Ent. Fr. 1890, p. 503 (69) (♂)<sup>1</sup>.

*Hab.* PANAMA, Chiriqui (*mus. Staudinger*<sup>1</sup>).

### CATADUPA.

*Catadupa*, Walker, Cat. xxviii. p. 444 (1863).

Walker founded this genus upon a single species from the Amazons, placing it in the family Tortricidæ. *Catadupa* is not mentioned by Mons. Ragonot in his papers on the classification of the Pyralidæ.

#### 1. *Catadupa splendens*, sp. n. (Tab. LIX. fig. 25, ♂.)

*Male.* Primaries reddish-brown, the costal margin with two small white streaks beyond the middle, a marginal row of small white spots extending from the apex to the anal angle, the apex and a rather large spot at the anal angle reddish-orange; secondaries yellow, broadly bordered with reddish-orange; the fringe reddish-brown: head, antennæ, palpi, and thorax reddish-brown, the abdomen orange-yellow. Expanse  $\frac{3}{4}$  inch.

*Hab.* PANAMA, Bugaba 1000 feet (*Champion*).

One specimen.

### ACROPTERYX.

*Acropteryx*, Ragonot, Ann. Soc. Ent. Fr. 1890, p. 469 (35).

Mons. Ragonot includes in this genus a single species from Chiriqui, his type having the head and body mutilated; he states that it somewhat resembles *Saccopleura* in the shape of the wings.

#### 1. *Acropteryx herbacealis*.

*Acropteryx herbacealis*, Ragon. Ann. Soc. Ent. Fr. 1890, p. 470 (36) (♂)<sup>1</sup>.

*Hab.* PANAMA, Chiriqui (*mus. Staudinger*).

Unknown to me.

### GALASA.

*Galasa*, Walker, Cat. xxxv. p. 1801 (1866); Ragonot, Ann. Ent. Soc. Fr. 1891, p. 618 (232).

*Cordylopeza*, Zeller, Verh. zool.-bot. Ges. Wien, xxiii. p. 206, t. 3. figg. 3 b-3 e (1873); Ragonot, Ann. Soc. Ent. Fr. 1890, p. 508 (74).



The type of Walker's genus was from Jamaica, and that of Zeller from North America; they are based upon the same species, *G. rubidana*, Walk. (= *nigrinodis*, Zell.).

1. **Galasa deera**, sp. n. (Tab. LX. fig. 1.)

Primaries reddish-brown, crossed about the middle from the costal to the inner margin by a fine greyish-white line, a submarginal line of the same colour extending from the costal margin to the anal angle; secondaries greyish, darkest round the outer margin: head and thorax reddish-brown, the abdomen grey, banded with white, the legs grey. Expanse  $\frac{6}{10}$  inch.

*Hab.* MEXICO, Teapa in Tabasco (*H. H. Smith*).

One specimen.

2. **Galasa (?) daulisalis**, sp. n. (Tab. LX. fig. 4.)

*Male.* Primaries reddish-brown, crossed about the middle from the costal to the inner margin by a wide, pale, bluish-grey band, which is edged on the inner side by a narrow white line, a curved dark brown line crossing the wing beyond the middle, the fringe reddish-brown; secondaries blackish-brown, the fringe blackish-brown: head, thorax, and tegulae pale reddish-brown, the abdomen and legs blackish-brown. Expanse  $\frac{8}{10}$  inch.

*Hab.* PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).

One specimen.

### CARCHA.

*Carcha*, Walker, Cat. xvii. p. 281 (1859).

*Caeloma*, Möschler, Abhandl. Senck. Ges. Frankf. xvi. p. 276 (1891).

Walker's type of the genus *Carcha* was from San Domingo, that of *Caeloma*, Möschl., from Porto Rico; they belong to the same species.

1. **Carcha hersilialis**.

*Carcha hersilialis*, Walk. Cat. xvii. p. 282<sup>1</sup>.

*Pyralis dispansalis*, Walk. Cat. xxxiv. p. 1228<sup>2</sup>.

*Pyralis curtalis*, Walk. loc. cit. p. 1230<sup>3</sup>.

*Caeloma tortricalis*, Möschl. Abhandl. Senck. Ges. Frankf. xvi. p. 277<sup>4</sup>; Ragon. Ann. Soc. Ent. Fr. 1890, p. 498 (64)<sup>5</sup>, and 1891, p. 614 (228)<sup>6</sup>.

*Hab.* HONDURAS, Limas<sup>3</sup>.—ANTILLES, Cuba<sup>5</sup>, San Domingo<sup>1 2</sup>, Porto Rico<sup>4</sup>.

### ETHNISTIS.

*Ethnistis*, Lederer, Wien. ent. Monats. vii. p. 245 (1863); Ragonot, Ann. Soc. Ent. Fr. 1890, p. 486 (52).

*Vurna*, Walker, Cat. xxxiv. p. 1189 (1865).

*Gazaca*, Walker, loc. cit. p. 1273 (1865).



### 1. *Ethnistis munitalis*.

*Ethnistis munitalis*, Lederer, Wien. ent. Monats. vii. p. 345, t. 6. fig. 13 (♀)<sup>1</sup>; Walk. Cat. xxxiv. p. 1321<sup>2</sup>; Ragon. Ann. Soc. Ent. Fr. 1890, p. 487 (53)<sup>3</sup>.

*Vurna instructalis*, Walk. Cat. xxxiv. p. 1189<sup>4</sup>.

*Gazaca dirutalis*, Walk. loc. cit. p. 1274<sup>5</sup>.

*Hab.* MEXICO, Jalapa (*M. Trujillo*); HONDURAS, Limas<sup>5</sup>; PANAMA, Chiriqui<sup>3</sup> (*Ribbe, in mus. Staudinger*).—VENEZUELA<sup>1 2 3</sup>; ANTILLES, San Domingo<sup>4</sup>, Dominica.

The specimen from Dominica in my own collection is much darker in colour, and has the large dark spot on the primaries more distinct, but in other respects it is almost identical with those from our region.

### IDNEA.

*Idnea*, Herrich-Schäffer, Samml. aussereur. Schmett. p. 75 (1850–58); Ragonot, Ann. Soc. Ent. Fr. 1890, p. 470 (36).

*Uzeda*, Walker, Cat. xxviii. p. 442 (1863).

This genus now contains about five species, all from Tropical South America; one of these extends into the southern part of our region.

### 1. *Idnea propria*. (Tab. LX. fig. 2, ♀.)

*Torda propria*, Walk. Cat. xxviii. p. 438<sup>1</sup>.

*Uzeda vitriferana*, Walk. loc. cit. p. 442<sup>2</sup>.

*Hab.* PANAMA, Volcan de Chiriqui 2000 to 3000 feet (*Champion*).—AMAZONS, Ega<sup>1 2</sup>; EAST PERU.

One specimen, almost identical with Walker's type in the National Museum.

### ZANCLODES.

*Zanclodes*, Ragonot, Ann. Soc. Ent. Fr. 1890, p. 474 (40).

This very remarkable genus was founded by Mons. Ragonot upon a single species from Brazil; it is allied to *Idnea*, Herr.-Schäffer. The insect extends northwards to Eastern Mexico.

### 1. *Zanclodes falcularis*.

*Zanclodes falcularis*, Ragon. Ann. Soc. Ent. Fr. 1890, p. 475 (41), t. 7. figg. 3, 3 a, b<sup>1</sup>.

*Hab.* MEXICO, Atoyac in Vera Cruz (*H. H. Smith*).—BRAZIL, Espiritu Santo<sup>1</sup>.

The Mexican specimen before me is almost identical with M. Ragonot's figure.

### PSECTRODES.

*Psectrodes*, Ragonot, Ann. Soc. Ent. Fr. 1890, p. 488 (54).

Mons. Ragonot refers three species to this genus, all of which are from Tropical South America; one of them also inhabits our region.



1. *Psectrodes herminialis*.

*Psectrodes herminialis*, Ragon. Ann. Soc. Ent. Fr. 1890, p. 488 (54), t. 7. figg. 6, 6 a (♀) <sup>1</sup>.

*Hab.* BRITISH HONDURAS, Belize (*Sir Alfred Moloney, in mus. D.*); PANAMA, Chiriqui (*Arcé, in mus. D.*).—BRAZIL <sup>1</sup>.

Our specimens agree well with Ragonot's figures.

## TETRAPHANA.

*Tetraphana*, Ragonot, Ann. Soc. Ent. Fr. 1890, p. 471 (37).

The type of this genus is *Ametris quadrifenestrata*, Herr.-Schäff., from Tropical South America; two other species have since been described by Dr. Pagenstecher, and we now add a very fine one from our region.

1. *Tetraphana alipes*.

*Tetraphana alipes*, Pagenst. Iris, v. p. 3, t. 1. fig. 1 (*T. albipes*) <sup>1</sup>.

*Hab.* MEXICO, Cuesta de Misantla in Vera Cruz (*M. Trujillo*).—AMAZONS, S. Paulo <sup>1</sup>.

One specimen, agreeing well with Dr. Pagenstecher's figure.

2. *Tetraphana daphne*, sp. n. (Tab. LX. figg. 5, 6, ♀.)

*Female.* Primaries and secondaries bright orange-red; the primaries shaded from the base to beyond the middle and along the costal margin with purplish-brown, and with a large hyaline round spot edged with black at the end of the cell, on the outer side of which is a short red streak and three narrow black lines crossing the wing from the costal to the inner margin—the first two concave, nearest the base, the third straight, considerably beyond the middle, this line continued across the middle of the secondaries to the anal angle; the fringe reddish-brown; the inner margin of the secondaries clothed with pure white hairs; the underside of both wings silky white, slightly shaded with yellow on the costal and outer margins, each wing with a submarginal row of indistinct fawn-coloured spots extending from the apex to the inner margin, the costal margin of the primaries and the fringe of both wings fawn-coloured: head, palpi, antennæ, thorax, and upperside of the abdomen bright orange-red, the base of the palpi and the thorax and abdomen white beneath; the legs white, the anterior pair with the femora and tibiæ red. Expanse  $2\frac{3}{4}$  inches.

*Hab.* MEXICO, Coatepec (*coll. Schaus*); PANAMA, Volcan de Chiriqui (*Ribbe, in mus. Staudinger*).

We figure Mr. Schaus's specimen from Coatepec; the one in Dr. Staudinger's collection is considerably paler in colour.

## SIGA.

*Siga*, Hübner, Verz. bek. Schmett. p. 197 (1816); Walker, Cat. xi. p. 670.

This genus was founded upon *Phalæna liris*, Cram., from the West Indies; we now add a second species from our region. *Siga* was placed amongst the Noctuidæ by Walker.



1. **Siga pyronia**, sp. n. (Tab. LX. fig. 7, ♀.)

*Female*. Primaries pale grey, crossed beyond the middle from the costal to near the inner margin by a wide hyaline band, which becomes quite narrow as it reaches the inner margin, and with a square-shaped hyaline spot at the end of the cell, beyond which on the outer side is an oval yellow spot, the costal margin and fringe whitish; secondaries pale grey, crossed about the middle from the costal to near the inner margin by a waved, rather wide, hyaline band, which is edged on the outer side with a zigzag yellow band, the fringe grey, on the inner margin white; the underside of both wings silky white, showing the hyaline bands: head, thorax, and abdomen greenish-grey above, white beneath, the antennæ yellowish-brown. Expanse  $2\frac{3}{4}$  inches.

*Hab.* PANAMA, Chiriqui (*Trötsch, in mus. Staudinger*).

A very distinct species.

MACALLA.

*Macalla*, Walker, Cat. xvi. p. 155 (1858).

*Aradrapha*, Walker, Cat. xxxiv. p. 1257 (1865).

This genus has been twice described by Walker, and from the same species—first under the *Deltoidæ* and later under the *Pyrilidæ*; the types are from Honduras. A second species is now added from the State of Panama. Walker's names are not mentioned by Mons. Ragonot.

1. **Macalla thyrsisalis**.

*Macalla thyrsisalis*, Walk. Cat. xvi. p. 156<sup>1</sup>.

*Aradrapha mixtalis*, Walk. Cat. xxxiv. p. 1257<sup>2</sup>.

*Hab.* HONDURAS (*Miller*<sup>1</sup>, *Dyson*<sup>2</sup>).

The only specimens I have seen of this species are the types in the National Collection.

2. **Macalla dapha**, sp. n. (Tab. LX. figg. 3, 3 a.)

Primaries fawn-colour, with an indistinct waved submarginal line extending from the costal to the inner margin, and a small black dot at the end of the cell; secondaries considerably paler than the primaries, semihyaline; the underside somewhat redder than above: head, antennæ, palpi, thorax, abdomen, and legs fawn-colour. Expanse  $1\frac{1}{4}$  inch.

*Hab.* PANAMA, Bugaba, Volcan de Chiriqui (*Champion*).

Two specimens, both of which appear to be males.

AURADISA.

*Auradisa*, Walker, Cat. xxxiv. p. 1504 (1865).

A genus containing a single species from Honduras; it is not noticed by Mons. Ragonot.

1. **Auradisa gelidalis**.

*Auradisa gelidalis*, Walk. Cat. xxxiv. p. 1505<sup>1</sup>.

*Myelois subalbella*, Walk. Cat. xxxv. p. 1714<sup>2</sup>.

*Hab.* HONDURAS (*Miller*<sup>1 2</sup>).

The types of these insects are in the British Museum.



## DEUTEROLLYTA.

*Deuterollyta*, Lederer, Wien. ent. Monats. vii. p. 358 (1863).

This genus was founded upon a Brazilian species, *D. conspicualis*, Leder.; it appears to be very closely allied to *Hemimatia*.

1. *Deuterollyta extensa*.

*Nephopteryx extensa*, Walk. Cat. xxvii. p. 61<sup>1</sup>.

*Deuterollyta variegata*, Warr. Ann. & Mag. Nat. Hist. (6) vii. p. 433<sup>2</sup>.

*Hab.* GUATEMALA (*Conradt, in mus. Staudinger*); PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—SOUTH-EAST BRAZIL, Rio Janeiro<sup>1 2</sup>.

The three specimens from Guatemala in Dr. Staudinger's collection are all in very poor condition, but I believe they are referable to Walker's species, examples of which from Rio Janeiro are contained in my own collection.

## HEMIMATIA.

*Hemimatia*, Lederer, Wien. ent. Monats. vii. p. 347 (1863).

*Toripalpus*, Grote, Proc. Bost. Soc. Nat. Hist. xix. p. 265 (1878).

Lederer included three species in *Hemimatia*—one from North America and two from Venezuela; the type of *Toripalpus* is *T. breviornatalis*, Grote, from Texas and Colorado. One of Lederer's species inhabits Northern Mexico.

1. *Hemimatia robustella*.

*Tetralopha robustella*, Zeller, Isis, 1848, p. 881<sup>1</sup> (reprinted by Grote, Bull. U. S. Geol. & Geogr. Surv. iv. p. 690).

*Hemimatia scortealis*, Lederer, Wien. ent. Monats. vii. pp. 347, 459, t. 7. fig. 12<sup>2</sup>.

*Hab.* NORTH AMERICA<sup>2</sup>, Georgia<sup>1</sup>, Colorado.—MEXICO, Northern Sonora (*Morrison*).

One specimen, very similar to others from Colorado in my own collection.

## UGRA.

*Ugra*, Walker, Cat. xxvii. p. 188 (1863).

*Euexippe*, Ragonot, Ann. Soc. Ent. Fr. 1890, p. 538 (104).

I believe Ragonot's genus to be the same as Walker's.

1. *Ugra parallela*.

*Ugra parallela*, Walk. Cat. xxvii. p. 189<sup>1</sup>; Warr. Trans. Ent. Soc. Lond. 1889, p. 260<sup>2</sup>.

*Euexippe bistrialis*, Ragon. Ann. Soc. Ent. Fr. 1890, p. 539 (105)<sup>3</sup>.

*Hab.* HONDURAS (*Dyson*<sup>1</sup>).—AMAZONS<sup>2</sup>; BRAZIL, Pernambuco<sup>3</sup>.



2. **Ugra subrosealis.** (Tab. LX. fig. 8, ♀.)

*Scopula subrosealis*, Walk. Cat. xxxiv. p. 1463<sup>1</sup>.

*Hab.* MEXICO, Teapa in Tabasco (*H. H. Smith*); GUATEMALA, Las Mercedes (*Champion*); HONDURAS, Limas<sup>1</sup>.—ECUADOR.

The specimens from our region are almost identical with others from Ecuador in my own collection; the latter are slightly darker in colour.

OPHIAS.

*Ophias*, Ragonot, Ann. Soc. Ent. Fr. 1890, p. 517 (83).

This genus was founded by Mons. Ragonot upon a single species from Brazil, the female only of which was known to him; the insect also occurs in the State of Panama.

1. **Ophias albiundalis.**

*Ophias albiundalis*, Ragon. Ann. Soc. Ent. Fr. 1890, p. 518 (84), t. 5. figg. 5, 5 a<sup>1</sup>.

*Hab.* PANAMA, Chiriqui (*Ribbe, in mus. Staudinger*).—BRAZIL, Pernambuco<sup>1</sup>.

One specimen from Chiriqui, very similar to Mons. Ragonot's figure, but with the lines crossing the primaries less distinct.

Subfam. *PYRALIDINÆ*.

STEMMATOPHORA.

*Stemmatophora*, Guenée, Sp. gén. des Lép. viii. p. 129 (1854); Lederer, Wien. ent. Monats. vii. p. 337; Möschler, Beitr. zur Schmett.-Fauna von Surinam, iv. p. 27; Ragonot, Ann. Soc. Ent. Fr. 1891, p. 85 (183).

The species placed in this genus by Guenée are all from the Old World. Möschler describes one from Surinam, and I now add two others.

1. **Stemmatophora nattereri.**

*Cliniodes* (?) *nattereri*, Feld. & Rogenh. Reise der Novara, Lep. t. 136. fig. 29<sup>1</sup>.

*Hab.* MEXICO, Paso de San Juan in Vera Cruz (*Schaus*).—AMAZONS<sup>1</sup>; BRAZIL<sup>1</sup>.

A single specimen from Mexico, is rather smaller than Felder and Rogenhofer's figure.

2. **Stemmatophora demonica**, sp. n. (Tab. LX. fig. 9, ♂.)

*Male.* Primaries and secondaries dark glossy brown; the primaries with a tuft of pale scales on the costal margin, and crossed from the costal to the inner margin by two faint brown lines—the first nearest the base, the second beyond the middle; the fringe dark glossy brown; the underside as above, but with the lines crossing the primaries less distinct: head, thorax, abdomen, antennæ, and legs dark brown.—

*Female.* Very similar to the male, but not so glossy. Expanse, ♂ ♀, 1¼ inch.

*Hab.* MEXICO, Paso de San Juan in Vera Cruz (*Schaus*), Cuesta de Misantla